



HOW TO TAKE GREAT PICTURES

What makes a good picture? A bad picture? A great one? The answer depends on what you expect when you take the picture.

Most photography books contain a section on how to create artistically creative pictures, and we get to that in Chapter 15, “Moving Beyond Snapshots.” But for most people, a good picture is one that captures a memory. That memory might be a special moment during a trip or family event, or it might be one of the thousands of ordinary things we see in our daily lives.

The difference between a bad picture, a good picture, and a great picture is often a matter of small details. With years of experience, you’ll learn to spot these details. To help you take great pictures right away, we’ve compiled a list of basic photographic techniques that help you take better pictures.

Our goal in this chapter is to increase your photographic success rate so that you get a higher percentage of great pictures and a lower percentage of bad ones. (Of course, the beauty of a digital camera is that you don’t have to pay for the developing costs of a bad picture; you can just delete it immediately.) In this chapter, you learn

- What makes a good picture good
- What makes a bad picture bad
- How to take better pictures

WHAT MAKES A GOOD PICTURE GOOD

It's not what you think.

A good picture is one that captures what the photographer intends the viewer to see. It extends the photographer's vision into the eye of the viewer. It captures a moment in time, often a moment that has special meaning for the photographer, the viewer, or both.

A good picture doesn't have to be technically perfect. A visit to any art gallery with a photographic collection proves this to be true. But most of us aren't taking photos for a museum exhibit. We're taking pictures for ourselves, our family and friends, and maybe for work.

Most amateur photographers want to be able to take sharp, clear photos with a high rate of success. That means taking more good pictures and fewer bad ones. Each time you press the shutter release button, you should feel confident that the image you just captured is exactly what you intended it to be, whether it's a picture of your kid's birthday party or that once-in-a-lifetime sunset you saw on vacation.

Every camera comes with a user's manual that tells how the camera's controls work. It also tells you how to put in the batteries, turn on the camera, and how to operate the camera's controls. What those manuals don't tell you—and this is the whole point of this chapter—is how to take consistently good pictures. Over the years, I've learned what works and what doesn't. Later in this chapter, I pass on some tips and techniques that can make you a better photographer.

WHAT MAKES A BAD PICTURE BAD

Many things make a bad picture bad, and we show you how to avoid them later in this chapter. But the worst picture of all is the one you missed because the camera wasn't set up properly or because you didn't understand how some aspect of the camera works.

Some pictures turn out badly because the photographer expected more than the camera could deliver. Watch any major sporting event, and you see hundreds of flashes going off in the stands at key points in the game. The problem is, the range of an average point-and-shoot camera's built-in flash is about 15 feet. Even if the flash could reach that far, the lens on a P&S camera can't possibly pick up any detail on the playing field—yet thousands of fans are snapping away up there in the stands, thinking they they'll have some *Sports Illustrated*-quality pictures to show their friends.

Sometimes, the difference between a good picture and a bad one is a matter of subtleties. As an example, look at two pictures of my son, Aaron, and his friend Will in Figure 13.1. Both pictures were taken a few seconds apart on their first day as college students.



Figure 13.1

These two pictures show how a few minor changes in framing and exposure can have a drastic effect on the quality of the picture.

As you can see, both pictures are very similar, but the right picture stands out as being much better than the left one. There are two subtle differences between the pictures.

First, the left picture is framed too loosely. As a result, you can see the feet of some other students above Aaron's head. By zooming in very slightly, I was able to eliminate the feet without cutting off any part of Aaron or Will's bodies. As an alternative, I could have moved a little to the right—if I hadn't been standing next to a tree.

Second, although the pictures were taken on a sunny day, my subjects are sitting in the shade. In the left picture, the camera adjusted the exposure for the bright areas behind Aaron and Will, leaving them in relative darkness. I could have manually overridden the camera's autoexposure setting to compensate, but that would have blown out the detail in the bricks. Instead, I used the camera's built-in flash to fill in the harsh shadow areas.

TAKING BETTER PICTURES

Over the past 30 years, I've taken tens of thousands of pictures with all kinds of film and, more recently, digital cameras. The first thing I learned about digital cameras is that being a good film photographer doesn't automatically make you a good digital photographer. Digital cameras are different than film cameras, and they often require different techniques to achieve the best results.

The rest of this chapter lists a few key concepts and techniques that enable you to take better pictures. I've kept this list intentionally short, so that I could concentrate on the most important and effective tips and techniques.

You Can't Take Pictures Without a Camera

This might seem obvious, but you can't take great pictures if you leave your camera at home. Some people seem to be afraid to take their cameras out into the real world. You

paid a lot of money for your digital camera, and the only way to get your money's worth out of your camera is to take pictures with it!

If you're afraid of damaging your camera, buy a small protective case (not a bulky camera bag.) They're inexpensive and offer good protection against dust, light rain, and scratches. Many cases have storage compartments for extra batteries and memory cards, so you can carry everything you need in one small package. If you need to carry other stuff with you, you can safely put the camera—in its case—inside a larger bag.



Watch the Heat!

If you live in a hot climate, don't leave your camera in a hot car. The temperature inside a parked car can exceed 130 degrees, which is hot enough to damage the image sensor and LCD screen in your camera.

Be Prepared

That old Boy Scout mantra is especially true in photography. If you're planning to take pictures, you need to be prepared. That means bringing along enough memory storage and battery power to meet your expected picture-taking needs.

To hold retail prices down, most cameras come with a very small memory card that holds only a few pictures. In most cases, you need to purchase an additional memory card for your camera. Individual needs vary, but as a general rule you should have enough memory to take 40–50 pictures at your camera's highest quality settings.



Two for One?

As consumers, we've learned that most things are cheaper when you buy them in larger quantities. That extra-large-size shampoo might be a better deal than the small bottle, but memory cards are an exception to the rule.

For example, a 128Mb memory card costs more than twice as much as two 64Mb cards, which in turn costs more than two 32Mb cards. Higher-density cards cost more to produce, and they're more convenient to use because you can take more pictures without changing cards; but you pay a premium price for the convenience.

There are good reasons to stick with less expensive, lower-density cards. By splitting your memory investment across two or more cards, you cut your losses if one of the cards is lost or damaged. And if you buy a second camera, you can use one card in each camera.

Hold Your Camera Level and Steady

This might sound like an obvious thing to do, but it's one of the most common causes of bad pictures. If possible, use both hands to hold the camera, especially when you're shooting at full zoom or in low light conditions with a slow shutter speed. By using both hands, you reduce camera shake and get sharper pictures.

If your picture has strong vertical or horizontal lines, it is very important to keep the camera parallel with the horizon; otherwise, your pictures appear tilted. Unfortunately, it's easier to

see the tilt in a finished picture than it is in the camera viewfinder. Many viewfinders and LCD screens provide framing lines that you can use as a guide to help keep the camera level.



Steady As She Goes!

For telephoto and low-light shots when you don't have a tripod, try tucking your elbows up against your ribs. Although it looks awkward, this position really does help keep the camera steady. As an alternative, you can often steady the camera by placing it on or up against a solid object like a fence or pole.

Look Before You Shoot!

This is another obvious pointer, but it's an important one. After you've composed your picture, look behind and around your main subject for other objects in the picture. When taking a picture in which a person is the subject, make sure there are no distracting objects (like a tree, sign, or lamp post) "growing" out of your subject's head.

If you're taking a full-body people picture, make sure that you don't cut your subjects off at their shoes. For head-and-shoulder portrait shots, leave some space above the subject's head, but not so much that half the picture is sky or ceiling.

Watch out for reflective objects like windows, mirrors, and shiny objects in the background. This is especially important when taking flash pictures; the reflection fools the camera's light meter, resulting in a very underexposed picture.

Use the Appropriate Image and Quality Settings

All digital cameras have settings that enable you to adjust the number of pixels in the image (usually called resolution or image size), and a setting that enables you to adjust the amount of data compression used to store the image (usually called image quality). Smaller images take up less space than larger ones, so you can get more images on a memory card by using the smaller image size. Similarly, highly compressed (lower quality) images take up less space than high quality images.

Unless you know that you don't need the higher resolution, you should always shoot with your camera set for the largest image size and the highest quality setting. You can always downsize a large image (using photo editing software on your PC) to make it smaller, but you can't recapture the image detail that is lost when you shoot at a small image size.



JPEG or RAW?

Many cameras have an uncompressed storage mode (usually called TIFF or RAW mode) that stores the image without compressing it. These modes are useful when you want to capture the absolute best possible image, but they require 3 or 4 times as much storage space on the camera's memory card. Uncompressed images also take longer to download and take up more room on your hard drive.

RAW or TIFF images are useful for making very large prints, but you won't see a huge quality improvement over your camera's highest-quality JPEG setting.

If you're shooting specifically for the Web or e-mail, you can safely use one of your camera's lower-resolution settings. Shooting in a smaller image size enables you to save more images on your memory card, and it saves you the drudgery of having to open, resize, and save each image on your PC.

Review Your Photos

One of the great things about digital photography is that you can see your pictures just seconds after taking them. This instant review feature enables you to make sure that you got a good picture, and it's a nice feature to have at family gatherings, weddings, and other special events. But you can also use your camera's instant review feature to make you a better photographer.

If you're not sure how a picture turned out, check it on the LCD screen before you lose the opportunity to re-shoot the picture. But don't overdo it. The LCD screen is a major source of battery drain, and if you review every shot, you might run out of batteries before you run out of photo opportunities.



Extending Battery Life

Most digital cameras include an automatic review feature that shows each picture on the LCD screen for a few seconds after you take the picture. Although this is a nice feature, it also consumes a lot of battery power. Unless you really need to see each picture, turning the review feature off can double your battery life.

Anticipate the Moment

Digital cameras suffer from an annoying problem called *shutter lag*, which is the delay between the time you press the shutter release and the time the camera actually takes the picture. All cameras suffer from some shutter lag, but point and shoot cameras—both film and digital—are the worst offenders. The lag is caused primarily by the camera's autofocus mechanism. The problem with shutter lag is that you're never quite sure when the camera is actually going to take the picture.

In extreme cases, the camera might take a second or two to lock focus, or it might not be able to focus at all. In the meantime, you're standing there with your finger on the button, waiting for something to happen. This is especially frustrating when you're shooting impatient or fast-moving subjects like kids, animals, and sporting events. Fortunately, there's a workaround that can help you get better pictures in spite of the lag.

On most cameras, you can lightly press the shutter release button (about halfway down) to pre-focus the camera. After the camera is focused, keep your finger on the button until you're ready to take the picture, then press the button all the way down. The camera takes the picture without refocusing, thus eliminating most of the shutter lag. This technique takes some practice, and there is still a small amount of lag after you press the button all the way down.

**Easy Does It!**

Speaking of the shutter release button, be careful not to press it too hard. Pressing too hard or too fast can cause the camera to shake, which results in blurry pictures.

This is especially important when you're shooting in low light conditions with a slow shutter speed.

The pre-focus technique can be a lifesaver when you're waiting to take one of those once-in-a-lifetime shots where you won't have a second chance. For really important pictures, you should take a few practice shots before the actual event to make sure that the camera is actually able to focus.

**Stayin' Alive**

Here's every photographer's nightmare scenario: You're at an important event—your son's high school graduation, for example—waiting for your son to walk up and receive his diploma. You have fresh batteries and plenty of memory in the camera. You've taken a few test shots, so you know you're in a good position and that the lighting is okay.

As your son walks up to the stage, you confidently raise the camera to your eye—and the camera is dead as a doornail.

Most cameras have an automatic power-off feature that turns the camera off if you haven't taken a picture for a few minutes. This feature can save you from accidentally running your battery down when you forget to turn the camera off, but it can also turn the camera off while you're waiting to take a picture. You can temporarily override this feature by lightly pressing on the shutter release button.

For really important events, you might want to disable the automatic power-off feature so you won't miss a shot.

Dealing with Tricky Lighting

The light metering and autoexposure systems in most digital cameras are amazingly accurate, but they're not infallible. Although most autoexposure systems produce perfect exposures 90% of the time, you need to know when to recognize that other 10% so that you can override the camera's exposure choice.

Backlighting

Backlit subjects are the most problematic subjects you're likely to encounter. Backlighting happens with the light behind a subject is brighter than the light in front. The bright light behind the subject causes the camera to expose the image for the bright light, which often makes the foreground subject too dark. Figure 13.2 show how autoexposure systems can be fooled by a bright sky.

The sample pictures were taken on a cloudy day. Some of the clouds were almost black; others were bright white. In the first picture, the camera was set for multi-zone metering, which measures the light in several parts of the pictures to determine an average. Because

the sky is a large part of the picture, the camera decided that it needed to set the exposure to maintain the white in the clouds. Although the resulting photo has plenty of dynamic range (the dark clouds show up dark and the light clouds are nearly white), the main subject is too dark.

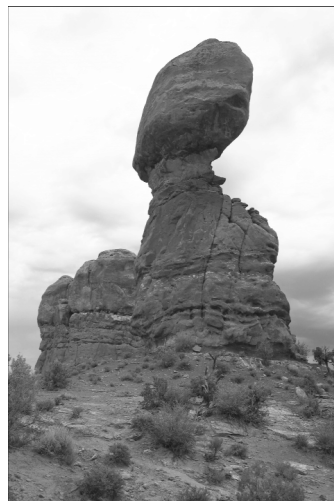
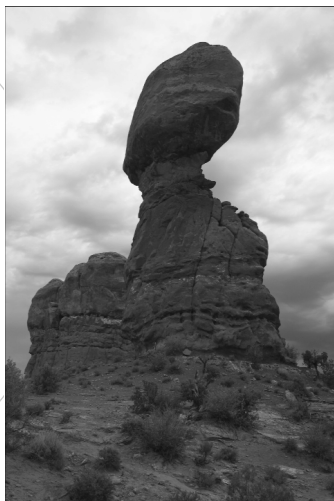


Figure 13.2

In the left picture, the bright sky fooled the camera's exposure system, resulting in a dark picture. In the right picture, I used center-weighted metering to expose for the Balanced Rock (in Arches National Park, Utah), ignoring the sky.

For the second picture, I used the camera's center-weighted metering feature to take the light reading off the rock itself. Center-weighted metering measures the light from the center of the picture, in this case ignoring the jumble of light and dark clouds behind the subject. Some cameras have a spot meter feature, which is similar to center weighting, but with a smaller metering area.

The resulting picture is much brighter, with good detail in the subject. The sky is somewhat overexposed, but this is unavoidable with backlit subjects. The detail in the lightest clouds is completely gone, but the darker clouds are still visible, maintaining the ominous tone of the sky.

If your camera doesn't have a center-weighted or spot metering option, there's another technique you can use to compensate for backlighting. Before you take the picture, tilt the camera down or zoom in to exclude the bright sky from the picture, then press the shutter release half way. This causes the camera to lock the exposure reading without the sky in the picture. Holding the shutter release pressed half-way, recompose the picture, and then press the shutter release to take the picture.



Locking Exposure

On many cameras, this technique locks both the exposure and the focus. Some cameras have a separate button marked AE Lock (for autoexposure lock) that holds the exposure reading separate while allowing you to re-focus with the shutter release button.

Extreme Contrast

Scenes with large amounts of contrast are problematic for digital cameras. The image sensor in a digital camera can capture a wide range of tones, but some scenes simply contain more contrast than the image sensor can handle. Although this most often happens when you're shooting a light subject on a dark background (or vice versa), it also happens when shooting outdoors on a very sunny day. In these situations, you must decide whether you want to expose for the shadows or the highlights. Figure 13.3 shows the problem in pictures.



Figure 13.3

Extremely contrasting scenes like this one force you to choose between properly exposed highlights (left) or shadows (right).

In the first picture, the camera made what is technically a perfect exposure. The brightest area of the picture along the top edge of the roof is perfectly exposed, and the shadow areas—the doorway behind the sign and the window frame—are very dark, as they should be. The problem is, I wanted to emphasize the wooden ladder and the Chili peppers (two New Mexico trademarks/clichés), but they are lost in the shadows. This is a case where what I want and what the camera wants isn't the same.

For the second picture, I zoomed in and metered off the ladder and peppers, then used the camera's AE lock button to hold the exposure while I zoomed out, recomposed the shot, and took the picture. In the second picture, the highlights along the edge of the roof are somewhat blown out, and the sky lost that nice deep blue from the first picture. But the ladder and peppers are now out of the shadows. As a bonus, the sign is much more readable.

Watch Your Focus!

Like automatic exposure, modern autofocus mechanisms are very accurate and usually reliable. But like autoexposure, your camera's autofocus circuits can't read your mind. In some situations, the autofocus system chooses to focus at a point in front of or behind your main subject, leaving your main subject out of focus. This is especially common in pictures where the main subject is not in the center of the picture. Figure 13.4 shows the problem in pictures.



Figure 13.4

In the left picture, the camera's autofocus circuit focused on a point behind the subjects. On the right, I pre-focused on one of the girls to keep them in sharp focus.

Most digital cameras focus on the center of the frame. When presented with an off-center subject like the two sisters in Figure 13.4, the camera dutifully did as it is programmed to do—it found the object in the center of the frame and focused on it. Unfortunately, this wasn't what I wanted.

Before you press the shutter release, look to see what is in the very center of the viewfinder. If it isn't part of your main subject, point the camera directly at the main subject, press the shutter release half way, and then recompose your shot and take the picture.

As was mentioned earlier, pressing and holding the shutter release locks both focus and exposure on most cameras. Some cameras have separate autoexposure and autofocus lock buttons, so you can lock focus on one part of the picture and take your exposure reading from another.

SUMI'S SNAPSHOT

I tried the outdoor flash technique, but my subjects were still too dark. What happened?

The built-in flash units on many P&S cameras are relatively weak. They're designed to provide enough light to take pictures indoors. Unfortunately, outdoor sunlight is very bright, and it takes a great deal of flash power to fill in harsh shadows, especially if you're more than a few feet from the subject. A more powerful external flash can help—if your camera is equipped to accept an external flash.

While waiting to take pictures at my daughter's piano recital, the batteries went dead after only a few pictures, even though the battery indicator showed a full charge just a few minutes before.

This is a common problem with Nickel Cadmium and Nickel Hydride rechargeable batteries. Both types of batteries die very suddenly with almost no warning. The battery charge indicator on most cameras can only give you a few minute's warning. When you see the low battery indicator, change batteries at the first opportunity.

My 64Mb memory card usually holds about 40 pictures. I took my camera to a party the other night and only had room for 30 pictures. What happened?

It sounds like your camera has an automatic ISO setting that automatically increases the camera's ISO sensitivity in dim light—like at that party. As the ISO speed increases, so does the noise level, which is visible as grain in the pictures. Noisy pictures require more storage space than standard pictures, which is why you only had room for 30 pictures.